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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/590,960	06/09/2000	Steven Augart	35479-00007	2374

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Mitchell, Silberberg & Knupp, LLP
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EXAMINER
MIRZA, ADNAN M

ART UNIT	PAPER NUMBER
2145	

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/590,960	AUGART, STEVEN
	Examiner	Art Unit	
	Adnan M. Mirza	2145	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
 Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 July 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zisapel et al

(6,665,702), and Cheng et al (6,731,314).

As per claims 1,18 Zisapel disclosed a method for use by a first node on a network in

communicating with a second node on the network, said method comprising the steps of: the first

node on the network receiving a data packet over the network from the second node on the

network (col. 5, lines 24-37), the data packet including a network identifier for the second node

and a Time-To-Live (TTL) field that has a value (col. 16, lines 15-22), wherein the value of the

TTL field for the data packet indicates a maximum additional number of hops that could have

been made by the data packet (col. 3, lines 41-54); first node sending a probe packet addressed to

the network identifier for the second node (col. 16, lines 39-46), wherein the probe packet also

includes a TTL field, and wherein an initial value for the TTL field of the probe packet is set

based on the value for the TTL field of the data packet (col. 8, lines 9-21). The first node

receiving a response packet from a third node on the network, in response to the probe packet,

wherein the first, second and third nodes are different nodes on the network (col. 7, lines 57-65);

However Zisapel et al did not disclose in detail the first node obtaining a geographic location for

the third node based on node identification information in the response packet; and the first node

transmitting geographic-specific information over the network to the second node based on the

geographic location obtained.

In the same field of endeavor Cheng disclosed a server is a computer that holds the files for one

or more sites. On the on hand, a very large web site may reside on a number of servers that may

be in different locations. IBM is a good example; its web site consists of thousand of files spread

out over many servers in world-wide locations (col. 26, lines 65-67; col. 27, lines 1-4)

It would have been obvious to one having ordinary skill in the art at the time of the invention

was made to have incorporated a server is a computer that holds the files for one or more sites.

On the on hand, a very large web site may reside on a number of servers that may be in different

locations. IBM is a good example; its web site consists of thousand of files spread out over many

servers in world-wide locations as taught by Cheng in the method of Zisapel to route the request

to a geographically more distant location would otherwise reduce in latency, fewer hops, or

provide more processing capacity at the server.

3.   As per claims 2,19 Zisapel-Cheng disclosed further comprising steps of: receiving a

response to the probe packet, the response including a network identifier for a router (Zisapel,

col. 16, lines 39-46); and comparing the network identifier for the router to a database that

includes a geographic location for each of plural network identifiers in order to identify a

geographic location for the router (Zisapel, col. 8, lines 32-44).

4.   As per claim 3 Zisapel-Cheng further comprising a step of using the geographic location

for marketing purposes (Cheng, col. 27, lines 1-5).

5.   As per claim 4 Zisapel-Cheng disclosed further comprising a step of using the geographic

location for compiling demographic information regarding site visitors (Zisapel, col. 15, lines

26-43).

6.   As per claim 5 Zisapel-Cheng disclosed further comprising a step of caching the

geographic location for use in responding to subsequent data packets from the second node

(Cheng, col. 24, lines 51-59).

7.   As per claim 6 Zisapel-Cheng disclosed wherein the geographic location identified for

the router is identified as a geographic location for the second node (Zisapel, col. 16, lines 4-21).

8. As per claims 7,21 Zisapel-Cheng disclosed further comprising steps of: obtaining information that is based on the geographic location for the second node; and transmitting said information from the first node to the second node (Zisapel, col. 16, lines 34-46).

9. As per claims 8,25 Zisapel-Cheng disclosed further comprising a step of sending a second probe packet prior to receiving a response from the probe packet (Zisapel, col. 16, lines 58-67).

10. As per claims 9,22 Zisapel-Cheng disclosed wherein the second probe packet has a TTL field, wherein an initial value for the TTL field of the second probe packet is set based on the TTL value of the data packet, and wherein the initial value set in the TTL field for the second probe packet is different than the initial value of the TTL field for the probe packet (Zisapel, col. 8, lines 9-21).

11. As per claims 10,26 Zisapel-Cheng disclosed further comprising a step of sending a number of probe packets having a same initial value in their TTL fields, wherein the number of probe packets is based on at least one of: value of the location information, an expected data gram loss rate, cost of bandwidth, availability of bandwidth, and network congestion control policies (Zisapel, col. 16, lines 15-22).

12. As per claim 11 Zisapel-Cheng disclosed further comprising steps of: estimating a number of hops taken by the data packet based on the TTL field of the data packet (Zisapel, col.

3, lines 41-54); and sending plural probe packets addressed to the network identifier for the S
second node (Zisapel, col, 16, lines 4-14).

13.   As per claims 12,28 Zisapel-Cheng disclosed wherein the initial TTL values for a
majority of the probe packets sent in response to the data packet are set based on the number of
hops estimated in said estimating step (Zisapel, col. 3, lines 41-54).

14.   As per claim 13 Zisapel-Cheng disclosed wherein the plural probe packets are sent
without waiting to receive a response from any previously sent probe packet (Zisapel, col. 7,
lines 57-65).

15.   As per claims 14,29 Zisapel-Cheng disclosed further comprising steps of: determining,
based on responses to the plural probe packets, whether a routing anomaly exists; and if it is
determined that a routing anomaly exists, sending a second set of probe packets (Zisapel, col. 7,
lines 57-65).

16.   As per claim 15 Zisapel-Cheng disclosed wherein it is determined in said determining
step that asymmetric routing exists (Zisapel, col. 15, lines 57-64).

17.   As per claim 16 Zisapel-Cheng disclosed wherein it is determined in said determining
step that multi-path routing exists (Zisapel, col. 17, lines 35-46).

18.   As per claims 17,24,30 Zisapel-Cheng disclosed wherein the data packet is a SYN packet

requesting initiation of a TCP/IP connection, and wherein the probe packet is sent prior to

completion of handshaking required to initiate the TCP/IP connection (Zisapel, col. 14, lines 49-

64).

19.   As per claim 20 Zisapel-Cheng disclosed further comprising a step of identifying a

geographic location for the second node as the geographic location for the router that is closest in

number of hops to the second node from among the routers for which a geographic location was

identified in said comparing step (Cheng, col. 26, lines 65-67; col. 27, lines 1-4.).

20.   As per claims 23,27 Zisapel-Cheng disclosed wherein each of the probe packets is

designed to elicit a response from a network device upon the earlier to occur of: (i) a specified

number of hops that is within a range of the number of hops that the data packet made $\pm$ N,

where N is approximately 5, and (ii) encountering the second node (Zisapel, col. 7, lines 57-65).

21.   As per claims 31-34 has the same limitations as claims 1,18 therefore under the same

limitations claims 31-34 can be rejected.

Response to Arguments

Applicant's arguments filed 07/22/2005 have been fully considered but they are not persuasive. Applicant's arguments are as follows:

22.   Applicant argued that prior art did not disclose, "the features obtaining a geographic location based on node identification information in the response packet (received from third node) and transmitting geographic-specific information to the second node based on the obtained geographic location".

As to applicant's argument Cheng disclosed, "a server is a computer that holds the files for one or more sites. On the on hand, a very large web site may reside on a number of servers that may be in different locations. IBM is a good example; its web site consists of thousand of files spread out over many servers in world-wide locations" (col. 26, lines 65-67; col. 27, lines 1-4). One ordinary skill in the art at the time of the invention knows the obtaining a geographic location based on node identification is same as saying having file or data being transferred between the different geographic location sites world wide on the bases of IP addressing information.

23.   Applicant argued that prior art did not disclose, " a first node transmitting probe packets designed, based on the number of hops estimated to have been made by a data packet from a

second node, to elicit responses from a group of network devices that primarily includes a first

few routers on the inbound path, the first node obtaining a geographic location for the second

node based on node identification information in the response packets; and the first node

transmitting geographic-specific information over the network to the second node based on the

geographic location obtained".

As to applicant's argument Cheng disclosed, "a server is a computer that holds the files for one

or more sites. On one hand, a very large web site may reside on a number of servers that may be

in different geographic locations. IBM is good example; its web site consists of thousand of files

spread out over many servers in world-wide locations. But a more typical example is probably

the site you are looking at, whatis.com. We reside on commercial space providers server with a

number of other sites that have nothing to do with Internet glossaries (col. 26, lines 63-67 & col.

27, lines 1-8)".

24.   Applicant argued that prior art did not disclose, "setting the initial value of a TTL field

for a probe packet based on the TTL value of an incoming data packet receiving a response

packet from a third node".

As to applicant's argument Zisapel disclosed, " the proximity analyzer measures proximity based

on the TTL of the received replies in traveling a round trip from the computer network to remote

server and back to the computer network" (col. 8, lines 9-12). "The measuring step may also

measure proximities based on the latency, relative TTL, and number of hops of the received

replies in traveling from the remote server to the computer network" (col. 8, lines 18-21).

Conclusion

25.   THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

26.   Any inquiry concerning this communication or earlier communication from the examiner

should be directed to Adnan Mirza whose telephone number is (571)-272-3885.

27.   The examiner can normally be reached on Monday to Friday during normal business

hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dharia Rupal can be reached on (571)- 272-3880. The fax for this group is (703)-

746-7239.

28.   The fax phone numbers for the organization where this application or proceeding is

assigned are as follows:

(703)-746-7239 (For Status Inquiries, Informal or Draft Communications, please label

"PROPOSED" or "DRAFT");

(703)-746-7239 (For Official Communications Intended for entry, please mark "EXPEDITED

PROCEDURE"),

(703)-746-7238 (For After Final Communications).

29.   Any Inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703)-305-3900.

Any response to a final action should be mailed to:

BOX AF

Commissioner of Patents and Trademarks Washington, D.C.20231

Or faxed to:

Hand-delivered responses should be brought to 4th Floor Receptionist, Crystal Park II,

2021 Crystal Drive, Arlington, VA 22202.

Adnan Mirza

Examiner

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER